Message

From: Walker, Stuart [Walker.Stuart@epa.gov]
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To: LEE, LILY [LEE.LILY@EPA.GOV]; Nguyen, Lyndsey [Nguyen.Lyndsey@epa.gov]
Subject: Consultation process on risk assessment models
Attachments: 176329 consultion yellowed.pdf

Risk Assessment Q&A consultation procedures
https://semspub.epa.gov/work/HQ/176329.pdf

I put in screenshots of relevant portions of the guidance talking about EPA's consultation procedures for alternative radiation models. I yellow highlighted the most important text. I also attached the copy with yellow highlights and above provided a link to the URL where the guidance is without yellow highlighting.

Q10. For CERCLA risk assessments at remedial sites, is it appropriate to use guidance or approaches developed by other Federal, State or Tribal Agencies or by International or National Organizations?

A. EPA has made the policy decision that risks from radionuclide exposures at remedial sites should be estimated in the same manner as chemical contaminants, which is consistent with EPA's remedial program implementing guidance (e.g., EPA 1997g, 1999d, 2000f). Consequently, approaches that do not follow the remedial program's policies and guidance should not be used at CERCLA remedial sites. Should regional staff have questions, they should consult with the Superfund remedial program's National Radiation Expert (Stuart Walker of OSRTI at the time this fact sheet was issued, at (703) 603-8748 or walker.stuart@epa.gov), before using guidance from other organizations that is not already incorporated into this and other EPA Superfund remedial program guidance. The current Superfund remedial program's National Radiation Expert will be listed on the Superfund Radiation webpage at: http://www.epa.gov/superfund/health/contaminants/radiation/index.htm.

Q16. What calculation methods or multimedia radionuclide transport and exposure models are recommended by EPA for Superfund risk assessments?

A. The PRG calculators (U.S. EPA 2002a, 2007, 2009a), which are used to develop risk-based PRGs for radionuclides, are recommended by EPA for Superfund remedial radiation risk assessments. These risk and dose assessment models are similar to EPA's methods for chemical risk assessment at CERCLA sites. Guidance on how to use each calculator, the default input parameters and their sources, is provided in the user guide for each calculator. In addition, a tutorial for using the PRG calculator is included in module 3 of the on-line training course *Radiation Risk Assessment: Update and Tools* (ITRC 2007), and a tutorial for the BPRG and SPRG calculators is provided in module 3 of the on-line training course *Decontamination and Decommissioning of Radiologically-Contaminated Facilities* (ITRC 2008b). The PRG calculator superseded the *Soil Screening Guidance for Radionuclides* (Rad SSG) calculator (U.S. EPA 2000e).

To avoid unnecessary inconsistency between radiological and chemical risk assessment at the same site, users should generally use the same model for chemical and radionuclide risk assessment. If there is a reason on a site-specific basis for using another model justification for doing so should be developed. The justification should include specific supporting data and information in the administrative record. The justification normally would include the model runs using both the recommended EPA PRG model and the alternative model. Users are cautioned that they should have a thorough understanding of both the PRG recommended model and any alternative model when evaluating whether a different approach is appropriate. When alternative models are used, the user should adjust the default input parameters to be as close as possible to the PRG inputs, which may be difficult since models tend to use different definitions for parameters. Numerous computerized mathematical models have been developed by EPA

REFERENCES

U.S. EPA 2007. *Preliminary Remediation Goals for Radionuclides in Buildings (BPRG)* electronic calculator.
http://epa-bprg.ornl.gov/

Stuart Walker
Superfund Remedial program National Radiation Expert
Science Policy Branch
Assessment and Remediation Division
Office of Superfund Remediation and Technology Innovation
W (703) 603-8748
C (202) 262-9986